

• COLORADO RIVER •
AQUEDUCT NEWS

THE METROPOLITAN WATER DISTRICT



OF SOUTHERN CALIFORNIA

Vol. IV

DECEMBER 10, 1937

No. 23



Mt. San Jacinto receives its first touch of snow. This picture was taken from the desert side of the mountain in the vicinity of Schedule 19.

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AQUEDUCT NEWS
 THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

306 WEST THIRD ST.
 LOS ANGELES, CALIFORNIA

Published twice monthly in the interest of Field and Office Workers on the Colorado River Aqueduct, and for the information of all other citizens of the Metropolitan Water District.

Vol. IV December 10, 1937 No. 23

Cabazon Crews Set All Time Record For San Jacinto Tunnel

Establishing an all-time record for excavation progress in one month on a single heading of the 13-mile San Jacinto tunnel, the Cabazon crews under the direction of Superintendent C. E. "Tim" Sides drove 869 feet of main heading during the month of November. The average for the thirty-day month was 29 feet per day. The previous record for one month in a single heading was 865 feet made in Cabazon during the 30 working days of last July.

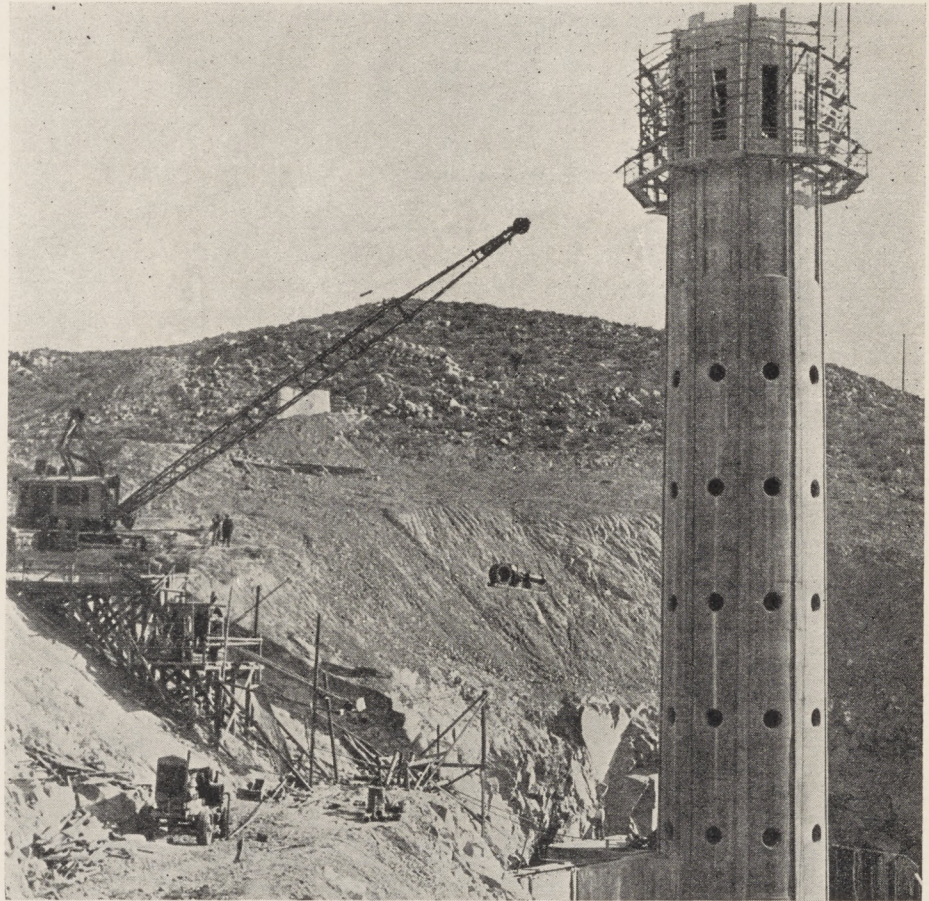
Making a spurt to break the record and end the month in a blaze of glory, the three shifts drove 39 feet during the 24 hours of November 30. This in itself is one of the best day's progress that has been made in the tunnel.

Adding to the record making, was the fact that the total progress for both the Cabazon and Potrero headings, amounting to 1,057 feet, was the best month's progress for 1937. This figure is especially noteworthy because of the heavy water flow intercepted in the Potrero heading during the month.

On November 11, the Potrero face encountered the heaviest flow that has yet been intercepted in the San Jacinto tunnel. On November 17 an average flow of 6000 gallons per minute was recorded at the face, and on the 18th the peak flow from the West Portal amounted to 27,300 g.p.m. In spite of this condition, the Potrero face was advanced 188 feet during the month.

Enlargement of the station at the foot of the Lawrence adit is progressing rapidly, and it is expected that main tunnel excavation from the adit will be started in January. A sketch of the proposed installations in the adit station is shown on page 8.

Fifteen feet remained to be driven on December 8 from the adit face to the Cabazon leg of the main tunnel.



Lowering one of the 50 valves into the pit to be installed in the Cajalco Outlet Tower. Each of the valves, which are installed from the inside of the tower, weighs approximately 3 tons.

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Monrovia Tunnel No. 4, L. E. Dixon Co., Bent Bros., Inc., and Johnson, Inc., W. N. Evans, Supt.

(Canal, Siphon, Conduit)

Schedules Nos. 12 and 12A, Three Companies, Inc., John Will, Supt.

Schedules Nos. 14, 15 and 16, Thompson - Starrett Co., Inc.,

Rodney Smith, Gen. Supt.; William Hayes, Excav. Supt.
 Schedules Nos. 18, 19 and 20, J. F. Shea Co., Inc., J. G. Shea, Gen. Mgr.; H. F. Rennebohm, Supt.

(Distribution Pipe Line)

Schedules No. 1P and 3P, American Concrete & Steel Pipe Co., Wm. A. Whiting, Gen. Supt.; D. H. Rankin, Plant Supt. and Const. Supt.

Schedules 6P and 7P, J. F. Shea Co., Inc., J. G. Shea, Gen. Mgr.; Ed. H. Shea, Gen. Supt.
 Schedule 9P, 10P, 11P, United Concrete Pipe Corp., John Huber, Plant Supt.; Roy Richards, Construction Supt.

Schedules 2B and 2S, Western Pipe & Steel Co., L. L. White, Supt.

Schedules 8C, 9C, 12C, Basich Bros.; Dick Noble, Supt.
 Schedules 21SC, 22SC, 23SC, J. F. Shea Co.

(Dams)

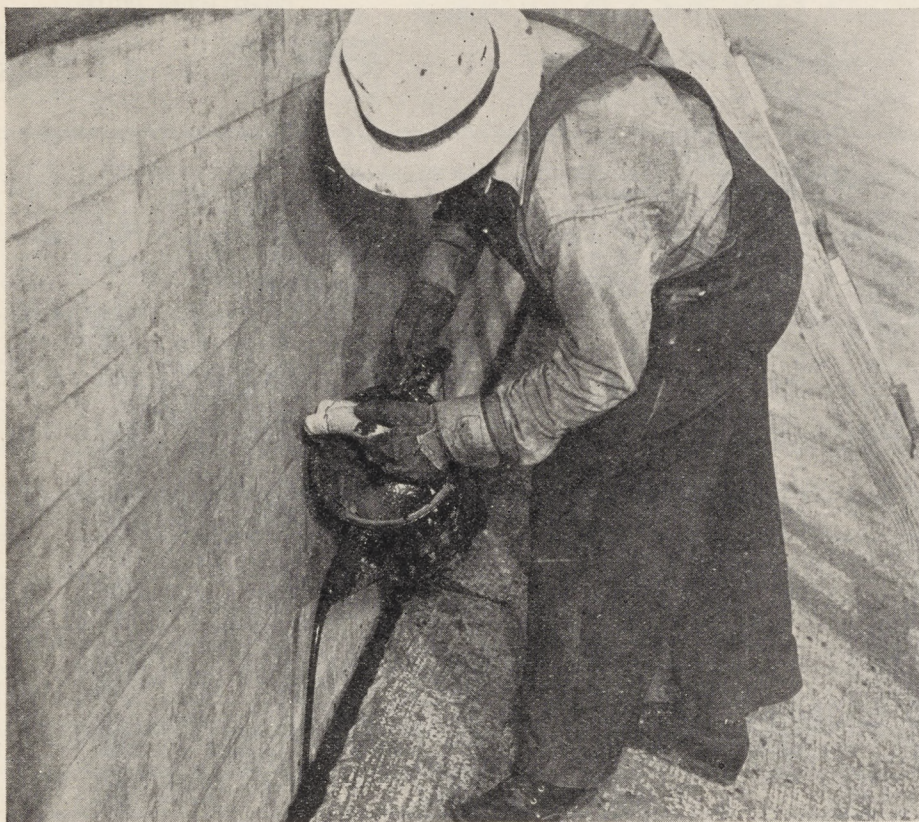
Cajalco dam, The Griffith Co., Franz Fohl, Gen. Supt.
 Parker Dam, J. F. Shea Co., Frank Crowe, Gen. Supt., E. A. Moritz, Constr. Eng., U.S.B.R.
 Gene Wash dam, Copper Basin dam, J. F. Shea Co., Frank Crowe, Gen. Supt.

(Pumping Plants)

Intake and Gene, Winston Bros. and Crowell, R. A. Crowell, Supt.; F. T. Hillman, Engr.

Eagle Mountain, L. E. Dixon Co.; J. H. Larkin, Supt.

Hayfield, Dixon and Case; Crawford Strohecker, Supt.



Pouring asphalt in the expansion joint at the intersection of the top of the Cajalco dike paving slab and the parapet wall running along the top of the dike. Approximately 34,000 pounds of asphalt are required to fill this joint, which is about a mile and a half long.

Nearly 7 Million Yards Of Earth Placed At Cajalco

Construction of the Cajalco Reservoir, the terminal reservoir of the aqueduct, is rapidly nearing completion. Major earthfill construction was completed in November with the placing of the last borrow-pit material on the dam, and by the time this issue of the NEWS is printed the concrete paving slab on the dam will have been completed.

Located at the terminus of the 242-mile main aqueduct, the reservoir is at the head of the 150-mile distributing system, and will have an initial capacity of 100,000 acre feet. This amounts to more than 32 billion gallons of water.

Including the fill in the one and a half mile dike, a total of 6,971,840 cubic yards of earth has been placed and compacted on the dike and dam since the job was started in September, 1935.

Running along the northern rim of the reservoir, the long dike has a maximum height of 90 feet, is 600 feet thick at its base, and contains 3,855,540 cubic yards of earth. Blocking Cajalco Can-

yon at the western end of the reservoir basin, the dam has a maximum height of

Bids To Be Opened On Various Types Of Materials

Specifications on which bids are to be opened in the near future include the following:

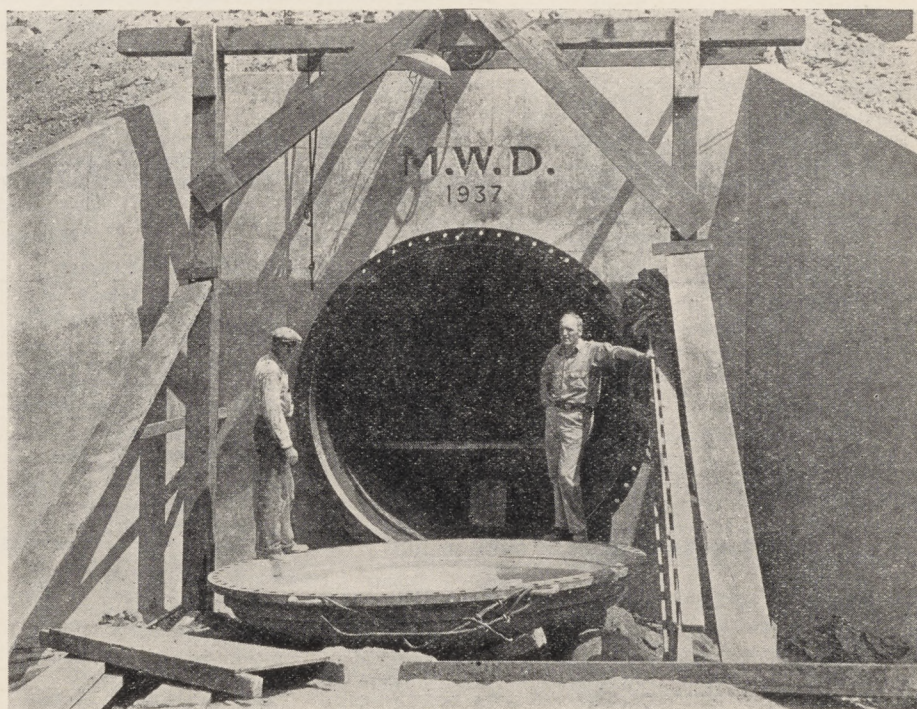
Specifications No. 257 for furnishing ten electric motor starters for use with the circulating water pumps at the aqueduct pumping plants. Bids to be opened on December 14, 1937.

On the same date bids will be opened on Specifications No. 259 for furnishing 62,300 tons of concrete aggregates for lining of the San Jacinto tunnel.

Specifications No. 258, bids to be opened on December 28, call for the furnishing of two inlet gates with hydraulic cylinders, for use in the inlet structure at the Hayfield pumping plant.

On January 4, 1938, bids will be opened on Specifications No. 256. The materials called for include various types of valves and pressure regulating assemblies for the operation of the Palos Verdes cross-feeder of the distributing system.

194 feet, is 1700 feet thick at its base (nearly a third of a mile), and contains 3,116,300 cubic yards of earth fill. Both structures are paved on their up-stream sides with 8-inch slabs of reinforced concrete. A concrete parapet wall will also extend along the crest of the dike and dam.



The access portal to the Pasadena tunnel on the distributing system. Assistant Engineer "Hank" Mills is shown at the right in the picture.

CONSTRUCTION

TUNNELS

TUNNEL EXCAVATION (MILES)

	Completed	Remaining
Aqueduct	88.73	3.38
Distribution	16.20	0
Total	104.93	3.38

November 1 to November 30, 1937

TUNNEL LINING (MILES)

	Completed	Remaining
Aqueduct	84.18	7.93
Distribution	13.26	2.89
Total	97.44	10.82

AQUEDUCT

CONTRACTOR	TUNNEL	LENGTH IN FEET	EXCAVATION IN FEET					LINING IN FEET						
			NUMBER OF SHIFTS	AVERAGE PER SHIFT	THIS PERIOD	TOTAL TO DATE	REMAIN- ING	ARCH OR INVERT	NUMBER OF SHIFTS	AVERAGE PER SHIFT	THIS PERIOD	TOTAL TO DATE	REMAIN- ING	
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA	SAN JACINTO	(68,849)			(1,057)	(51,018)	(17,831)				(1,397)	(26,960)	(41,889)	
	Cabazon Shaft to East Portal	8,880		Completed		8,880	0	{ Arch	0	0	0	8,484	396	
	Cabazon to Lawrence	26,817	90	9.7	869	18,413	8,404	{ Invert*	0	0	0	8,484	396	
	Cabazon Pioneer	18,119		Suspended		7,274	0	{ Arch	21	30.5	641	2,855	23,962	
	Lawrence Adit	5,651	90	1.6	145	5,607	44	{ Invert*	17	167.9	2,855	2,855	23,962	
	Potrero Pioneer	15,195		Suspended										
	Potrero to Lawrence	17,670	90	2.1	188	8,243	9,427	Invert*	13	120.4	1,565	2,811	14,859	
	Potrero Shaft to West Portal	15,482		Completed		15,482	0	{ Arch	0	0	0	14,953	529	
								{ Invert*			0	15,482	0	
	TOTALS	Ft. Miles	68,849 (13.04)	180	5.8	1,057 (0.20)	51,018 (9.66)	17,831 (3.38)	Arch Invert	21 30	30.5 147.3	641 4,420	26,292 29,632	42,557 39,217

DISTRIBUTION

GRIFFITH CO.		CAJALCO OUTLET	2,368	Completed	2,368	0			0	2,341	0	
WEST CONSTRUCTION CO.	MONROVIA NO. 1 (From W.P.)	7,868		Completed	7,868	0			Completed	7,796	0	
	MONROVIA NO. 2 (From Jct.1)	940		Completed	940	0			Completed	856	0	
	MONROVIA NO. 3	(32,105)		Completed	(32,105)	(0)			(2,049)	(19,532)	(12,563)	
	East from Adit	11,340			11,340	0	Full Sec. Invert* Arch	48	19.2	920	12,204	
	West from Adit From West Portal }	20,765			5,913 }	0			0	19,352	539	
					14,851 }	0		27	52.3	1,411	4,322	15,569
DIXON, BENT BROS. & JOHNSON	MONROVIA NO. 4 (From W.P.)	8,133		Completed	8,133	0		15	11.1	166	5,441	2,692
	SAN RAFAEL No.1 (From W.P.)	4,047		Completed	4,047	0			Completed	4,028	0	
	SAN RAFAEL No. 2 (From E.P.)	5,669		Completed	5,669	0			Completed	5,661	0	
		TOTALS	Ft. Miles		61,130 (11.58)	0 0	Full Section	90	24.6	2,215 (0.42)	45,655 (8.64)	15,255 (2.89)

*Invert considered to equal 0.2 completed section

Miscellaneous Construction

November 14 to November 27, 1937

AQUEDUCT PUMPING PLANTS AND APPURTENANT WORKS

CONTRACTOR	FEATURES	EXCAVATION—Cu. Yds.				CONCRETE—Cu. Yds.				STEEL—Tons			
		Est. Quan.	Period	To Date	%	Est. Quan.	Period	To Date	%	Est. Quan.	Period	To Date	%
WINSTON BROS. CO. & WILLIAM C. CROWELL	Intake Plant	114,370	0	114,370	100	22,500	1,211	21,360	95	1,780	25.9	1,597.5	90
	Gene Plant	175,092	0	175,092	100	23,089	502	22,611	99	2,849	5.1	2,699.6	94
WOOD AND BEVANDA	Iron Mt. Plant	354,909	0	354,909	100	22,942	0	22,942	100	1,796	0	1,795.7	100
L. E. DIXON CO.	Eagle Plant	267,316	0	258,089	96	28,079	700	25,234	90	2,257	34.4	1,676.7	74
L. E. Dixon & Case Const. Co.	Hayfield Plant	354,684	3,582	350,721	99	31,408	1,155	24,380	77	2,809	69.4	1,395.0	49
	TOTALS		3,582	1,253,141			3,568	115,366			134.8	7,909.0	

PARKER RESERVOIR—SIX COMPANIES, INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnels—Excav.	3,463 Ft.	0	3,463	100
Diversion Tunnels—Concrete	3,363 Ft.	0	3,363	100
Cofferdams—Excav.	227,582 C.Y.	0	227,582	100
Cofferdams—Fill	464,890 C.Y.	0	464,890	100
Outlet Works—Excav.	220,000 C.Y.	0	207,176	94
Outlet Works—Concrete	5,000 C.Y.	0	3,735	75
Dam—Excavation	1,510,200 C.Y.	0	1,508,105	99
Dam—Concrete	297,900 C.Y.	25,869	217,028	78
Power House—Excav.	58,000 C.Y.	0	56,700	98
Power House—Concrete	14,000 C.Y.	3,819	4,579	33

CAJALCO RESERVOIR—GRIFFITH COMPANY

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnel	2,000 Ft.	0	2,000	100
Outlet App. Channel—Exc.	199,190 C.Y.	0	199,190	100
Outlet Tower—Concrete	3,290 C.Y.	56	3,170	96
Dam & Spillway—Exc.	757,800 C.Y.	1,130	687,930	91
Dam—Fill	3,131,000 C.Y.	2,100	3,115,300	99
Dam & Spillway—Concrete	24,830 C.Y.	2,975	24,285	98
Dike—Excavation	13,950 C.Y.	0	13,950	100
Dike—Fill	3,855,620 C.Y.	0	3,855,540	100
Dike—Concrete	44,100 C.Y.	740	43,615	99

GENE WASH RESERVOIR—J. F. SHEA CO., INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Dam—Excavation	7,500	0	7,500	100
Dam—Concrete	13,365 C.Y.	1,294	2,380	18
Spillway—Excavation	4,762	0	4,762	100
Spillway—Concrete	4,800 C.Y.	429	4,523	94
Dike—Excavation	4,000 C.Y.	0	1,840	46
Dike—Fill	10,500 C.Y.			
Dike—Concrete	1,200 C.Y.	0	200	17

COPPER BASIN RESERVOIR—J. F. SHEA CO., INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Dam—Excavation	8,700 C.Y.	1,300	7,500	86
Dam—Concret	14,275 C.Y.			
Spillway—Excavation	5,300 C.Y.	544	4,844	92
Spillway—Concrete	450 C.Y.			
Outlet Works—Excavation	1,000 C.Y.			
Outlet Works—Concrete	2,215 C.Y.			
Gate House Superstructure				

ION PROGRESS

CANAL, CONDUIT AND SIPHON (MILES)

	Completed	Remaining
Excavation	143.02	2.58
Concrete	139.63	4.92
Back Fill	73.89	6.94

CANAL, CONDUIT, SIPHON & PIPE LINES

November 14 to November 27, 1937

DISTRIBUTION PIPE LINE (MILES)

	Completed	Remaining
Excavation	46.04	0.27
Concrete	46.01	0.30
Back Fill	45.38	0.93

AQUEDUCT

SCHED. NO.	CONTRACTOR	FEATURES	Length In Feet	EXCAVATION—Feet			CONCRETE—Feet			BACKFILL—Feet		
				Period	To Date	Remain'g	Period	To Date	Remain'g	Period	To Date	Remain'g
14	THOMPSON-STARRETT CO.	Conduit and Siphons	32,366	0	32,366	0	0	32,366	0	0	32,366	0
15		Conduit and Siphons	35,849	0	35,849	0	0	35,849	0	0	35,849	0
16		Conduit and Siphons	19,254	1,075	13,155	6,099	1,492	10,177	9,077	910	7,613	11,641
18	J. F. SHEA CO., INC.	Conduit and Siphons	27,537	0	27,537	0	0	27,537	0	0	27,327	210
19	J. F. SHEA CO., INC.	Conduit and Siphons	37,105	1,500	29,625	7,480	2,075	20,929	16,176	2,000	13,384	23,721
20		Siphons	18,618	0	18,618	0	0	18,618	0	0	18,618	0
20 A & B	M. W. D.—FORCE ACCT.	Siphons	752	0	705	47	0	0	752	0	0	752
3	WINSTON BROS. CO. & WILLIAM C. CROWELL	Siphon (Gene Inlet)	1,877	0	1,877	0	0	1,860	17	0	1,478	320
4		Siphon (Copper Basin)	450	0	450	0	0	450	0	0	0	0
TOTALS			173,808	2,575	160,182	13,626	3,567	147,786	26,022	2,910	136,635	36,644

DISTRIBUTION PIPE LINES

1	AMER. CONC. & STEEL PIPE CO.	Precast Concrete Pipe	12,277	0	12,277	0	0	12,277	0	250	12,102	175
2	WESTERN PIPE & STL. CO.	Welded Steel Pipe	54,530	0	54,530	0	0	54,530	0	0	53,501	0
3	AMER. CONC. & STEEL PIPE CO.	Precast Concrete Pipe	20,124	0	20,124	0	0	20,124	0	0	20,124	0
4		Precast Concrete Pipe	25,867	0	25,867	0	0	25,867	0	0	25,867	0
5		Precast Concrete Pipe	24,892	0	24,892	0	0	24,892	0	0	24,892	0
6	J. F. SHEA CO., Inc.	Precast Concrete Pipe	27,294	0	27,294	0	0	27,294	0	0	27,294	0
7		Precast Concrete Pipe	30,044	0	29,878	166	200	29,880	164	0	28,341	1,703
9	UNITED CONC. PIPE CORP.	Precast Concrete Pipe	8,697	0	8,388	309	0	8,388	309	0	7,863	834
10		Precast Concrete Pipe	10,517	0	10,517	0	0	10,517	0	0	10,450	67
11		Precast Concrete Pipe	4,105	0	4,105	0	0	4,105	0	0	3,197	908
1C-9C-12C	BASICH BROTHERS	Cast-in-Place Conc. Pipe	1,656	0	708	948	15	521	1,135	0	403	1,253
TOTALS			220,003	0	218,580	1,423	215	218,395	1,608	250	214,034	4,940

Completed Features

TUNNELS

	CONTRACTOR	TUNNEL	Length in Miles	Work Started	Work Completed
AQUEDUCT	MORRISON-KNUDSEN CO.	Mecca Pass, No. 1, 2 & 3	1.13	7-17-33	2-10-35
	WEST CONSTRUCTION CO.	Whitewater Nos. 1 & 2	1.94	7-18-33	4-15-35
	SHOFNER & GORDON	Hayfield No. 2	1.03	7-8-33	7-27-35
	HAMILTON & GLEASON	Bernasconi	1.18	4-19-33	11-21-35
	J. F. SHEA CO., INC.	Cottonwood	3.81	6-14-33	12-29-35
	HUNKIN-CONKEY CON. CO.	Hayfield No. 1	1.84	10-21-33	1-9-36
	DIXON & BENT BROS.	W. Eagle—West Portion	2.02	9-8-33	3-12-36
	DRAVO CONTRACTING CO.	Valverde	7.20	6-7-33	10-18-36
	WALSH CONSTRUCTION CO.	Colorado River	1.04	3-2-34	1-29-36
	WALSH CONSTRUCTION CO.	Copper Basin Nos. 1 & 2	2.32	10-4-33	2-20-36
	WALSH CONSTRUCTION CO.	Whipple Mountain	6.11	8-25-33	1-26-37
	UTAH CONSTRUCTION CO.	Iron Mt.—West Portion	3.07	5-15-33	10-23-36
	WINSTON BROS. CO.	Iron Mt.—East Portion	4.48	8-9-33	10-30-36
	METRO. WATER DIST.	1000 Palms No. 1	3.04	1-25-33	1-7-37
	"	1000 Palms No. 2	0.73	2-24-33	12-19-35
	"	Wide Canyon No. 1	2.71	3-31-33	2-11-37
	"	Wide Canyon No. 2	0.16	3-24-33	2-12-37
	"	Seven Palms	3.17	4-27-33	2-2-37
	"	Long Canyon	2.90	3-6-34	12-31-36
	"	Blind Canyon	1.29	3-22-34	12-3-36
	"	Morongo No. 1	1.08	4-21-34	1-20-37
	"	Morongo No. 2	0.36	12-29-34	1-5-37
	BRODERICK & GORDON	West Eagle Mt.—E. Portion	3.00	2-8-34	5-6-37
	WINSTON BROS.	Coxcomb	3.37	9-15-33	4-26-37
	METRO. WATER DIST.	East Coachella	18.30	1-25-33	5-8-37
	BRODERICK & GORDON	East Eagle Mt.	1.79	6-8-34	7-23-37
TOTALS			79.07		
DISTRIBUTION	J. F. SHEA CO., INC.	Sierra Madre	1.27	9-1-35	10-31-36
	DIXON, BENT BROS. & JOHNSON	Pasadena Extension	1.05	10-5-35	11-24-36
	DIXON, BENT BROS. & JOHNSON	Pasadena	2.30	2-11-35	4-29-37
TOTALS			4.62		

CANAL, CONDUIT, SIPHON, AND PIPE LINES

	CONTRACTOR	FEATURE AND NAME OR SCHEDULE	Length in Miles	Work Started	Work Completed
AQUEDUCT	UNITED CONCRETE PIPE CORP.	Little Morongo Siphon	0.13	2-27-34	8-20-34
	METRO. WATER DIS.	Fan Hill Conduit and Siphon	0.32	10-21-33	11-19-34
	MORRISON-KNUDSEN CO.	Sch. No. 18-J, Big Morongo and San Andreas Siphon	1.86	2-12-35	9-16-36
	GRIFFITH COMPANY	Sch. No. 20-C, 21, 22, 23 & 23-A	12.79	1-5-35	10-13-36
	JAHN & BRESSI CONST. CO.	Sch. No. 5, Canal and Siphons	10.15	12-18-34	11-17-36
	JAHN & BRESSI CONST. CO.	Sch. No. 4, Canal and Siphons	10.08	6-6-35	3-18-37
	UTAH CONSTRUCTION CO.	Sch. No. 9, Canal, Conduit & Siph.	8.97	12-12-34	5-15-37
	BARRETT-HILP & MACCO CORP.	Sch. No. 2, 3, 7, Canal, Con. & Siph.	18.71	12-3-34	5-25-37
	METRO. WATER DIST.	Sch. No. 17, Conduit and Siphons	4.16	9-9-35	6-15-37
	AQUEDUCT CONST. CO	Sch. No. 1,10,11,13 Canal, Con. & S.	26.99	1-24-35	6-24-37
	WOOD & BEVANDA	Sch. No. 6, 8, Canal & Siphons	12.28	11-27-34	7-28-37
	THREE COMPANIES, INC.	Sch. No. 12, Conduit & Siphons	6.24	1-8-35	11-6-37
	TOTALS		112.68		
DISTRIBUTION	UNITED CONCRETE PIPE CORP.	Sch. No. 8P, Precast Concrete Pipe	4.65	2-21-36	3-20-37



SATURDAY - DECEMBER 18, 1937

ALTADENA COUNTRY CLUB
(SEE THE MAP ON YOUR TICKETS)

8:00 PM.

LET'S ALL GO TO THE
CHRISTMAS PARTY

DINNER ~ DANCING ~ ENTERTAINMENT

DOOR PRIZES

YOU'LL BE SORRY IF YOU MISS THIS PARTY

TARRIFF ~ \$1.25 PER HEAD

STEEL SIPHON COATING JOB DESCRIBED IN CORROSION REPORT

H. P. Vail, engineer in the Distribution Division, has recently prepared an interesting paper titled "Mitigation of Corrosion on 11½-Foot Diameter Steel Pipe Siphon of the Colorado River Aqueduct," which was presented at the 1937 Soil Erosion Conference, Bureau of Standards, Washington, D. C. The paper describes some of the unusual factors involved in protecting against corrosion on Schedule 2S, the 10-mile steel siphon across the Santa Ana River on the distributing system.

The pipe line is made up of 33-foot welded sections of steel pipe, all of which were coated on the inside with a special coal-tar enamel with an average thickness of 3/32 inch. This enamel alone weighs 1000 pounds in each section of pipe. Some sections of the line were also enameled on the outside, and it was all protected with a ¾ inch gunite coating. This gunite coating adds about 5 tons to the weight of each pipe. Fabrication of the pipe, involving 31,000 tons of steel, and enameling were done in Los Angeles plants, while the gunite coating was applied at a plant in the field.

Tickets Now On Sale For Big Xmas Party

As is pointed out in the above announcement (drawn by Frank Ostronic of the Distribution Division) the Employees Party Committee is planning a really big time for the Christmas party to be held at the Altadena Country Club on Saturday, December 18, 1937. Indications point to a full house as a result of early ticket sales and reservations. These tickets, \$1.25 each, are now available, and the committee has announced that early reservations should be made, although the tickets may be actually paid for after the next pay day. (That is, the pay day immediately preceding the party.)

Everything has been arranged to make the party a success for all aqueducters and their friends. In addition to an excellent 12-piece orchestra, other music will be available during the dinner and dance. Professional talent will be on hand for entertainment during the dance intermissions, and a feature of the evening will be the drawing of the very excellent door prizes that have been purchased for the event. Included among

PLANS UNDER WAY TO INCLUDE FIELD IN CREDIT UNION

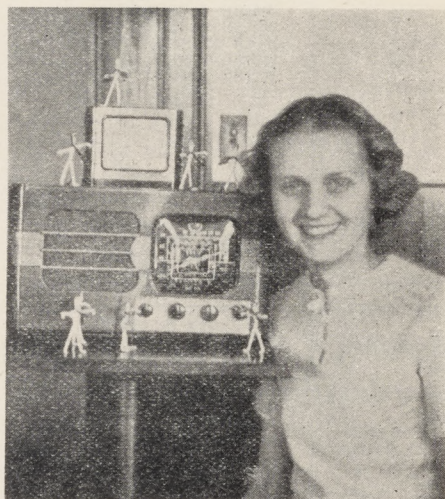
Negotiations have been set under way with the Federal Government by the Los Angeles Employees Credit Union to have the charter of the credit union amended to include employees working for the District in the field. Under its present charter from the government, the credit union may only accept deposits from, and make loans to, members who are employed in the Los Angeles office of the District.

DOCTOR NOW AT DIV. 2 HQ.

On December 1, the District employed Dr. J. Leon Jones for duty at Division 2 Headquarters Camp. The services of Dr. Jones will be available to all District employees in Divisions 1, 2, and 3. He will be available for consultation at Division 2 and will respond to emergency calls arising from injuries or serious illness in Divisions 1, 2, and 3. This medical service is supplementary to existing facilities.

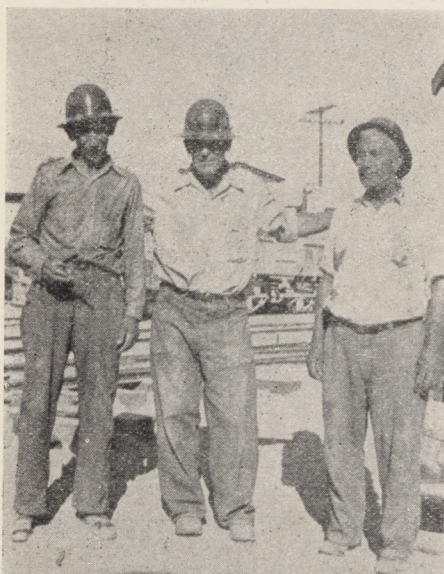
these prizes are a Telechron Electric Clock, a seven-tube Troy radio, a cocktail set, dishes and a number of other valuable items.

In addition to the dancing, a bridge tournament will be held, and the cocktail lounge will also be open all evening. All in all, it will be a party that will be long remembered by those who attend it.



No, the young lady will not be awarded as one of the door prizes for the Employees Christmas Party. The radio and the clock are, however, among the prizes that will be given to the holders of lucky numbers. All right, all right, her name is Lois Krauter, she is a member of the Party Committee, is single, and is employed in the Executive Secretary's office in Los Angeles.

NEWS FROM FIELD AND OFFICE



A trio of old time hard rock tunnel men. Taken at Fan Hill on the Coachellas in August, 1933, the picture shows, left to right: Ed Parrish, Walter Canaday, and Bob Smith. Ed Parrish, who sent the picture in, is now working at the Iron Mountain pumping plant, while Canaday and Smith are working on the San Jacinto tunnel. All three have put in many years of experience in underground work.

Barbara Turner, formerly in the Stenographic Section of the Los Angeles office, resigned from the District on November 24, and on November 26 she sailed on the S. S. Lurline to seek fame and fortune in Honolulu.

* * *

Hal White and Don Rankin, both of the American Concrete and Steel Pipe Company, and their wives, left Southern California on December 1 to go to Caracas, Venezuela, for their firm. They will be down there an indefinite length of time, their first job being the construction of sewers and drainage systems. Both Rankin and White have been employed in the construction of the distribution upper feeder lines, Rankin as general superintendent for the company, and White as engineer. Prior to going with the pipe company, Hal White had been employed by the District. He worked on the preliminary aqueduct surveys and was later in the Distribution Division.

* * *

The Banning Herald of November 25 announces that the Carnegie Hero Fund Commission has awarded a bronze medal and \$500 to Carl W. Miskin for his heroism in attempting to save the life

Aqueduct Temperatures		
November 15 to November 30		
	Max.	Min.
Div. 1	81°	47°
Div. 2	79°	44°
Div. 3	81°	47°
Div. 4	80°	54°
Divs. 5 and 6	80°	37°

of a Mexican boy who was trapped in a burning automobile near Indio on May 16, 1936. Carl Miskin was employed at the Fargo Camp of the Coachella tunnels at the time. While driving on the Indio road he came to the scene of an accident in which an automobile had crashed into a gasoline truck and both vehicles had burst into flame. In breaking a window in the overturned car and dragging a Mexican youth out of the wreckage, Miskin himself was severely burned. Later at a hospital, Miskin, in spite of the seriousness of his injuries, insisted that the Mexican boy be administered to first. The doctor who took care of the cases reported the incident to the Carnegie Commission who officially recognized Miskin's heroism on October 29, 1937. Miskin is now living in Montreal, Canada.

* * *

R. A. MacArthur, who has been in the Auditor's Office of the District since July, 1933, left the M.W.D. on November 30, to establish his own office in Los Angeles as a public accountant and auditor.

* * *

Belatedly the NEWS announces the arrival in the Robert Armstrong family of a son, Kirk Robert, who was born on October 30, weight 6 pounds, 10½ ounces. His dad, Bob Armstrong, is employed in the Design Division.

* * *

Assistant Engineer W. R. Clifford is now working at the Intake and Gene Wash pumping plants. He was formerly employed in the Operating Division.

* * *

Field Clerk Glen H. Davis has been transferred from the East Portal of the San Jacinto tunnel to Potrero.

* * *

Chainman J. B. Hattenbruck, formerly employed on the Distribution Division, is now working on Division 5.

* * *

Clara Larson has been transferred from the Purchasing Division in Los Angeles to the Banning Headquarters.



Popping out of the dark with a big grin in this flashlight picture is Rufus "Rufe" Fee. Rufe is a member of the L. A. Garage staff and has been with the M. W. D. since April, 1933.

Ivan Hallock, electrician at the East Portal of the San Jacinto tunnel, and a Banning Boy Scout official, conducted a party of approximately 175 Boy Scouts on a trip into the San Jacinto tunnel. The boys were from the Banning area as well as the Riverside and Arlington troops. Hard rockers who read accounts of the party's visit in the local papers were especially interested in one item. The youngsters were very much impressed by the amount of water in the tunnel, and one newspaper account written by one of the Scouts stated that both hot and cold water is running in the headings. What they probably saw was water turned into steam by the red hot speed which the Cabazon crews made during the month of November.

* * *

James F. Bonnell, William H. Epfinger, and Henry Johnson, all formerly employed on the construction of the Cajalco Reservoir, have resigned from the District to take positions with the United States Engineers office. They will be engaged in soil testing work.

* * *

Jerry Rehor has been transferred from Cabazon clerical to Division 5 engineering.

* * *

Inspector B. J. Soderblom has been transferred from the Distribution Division to Division 4.

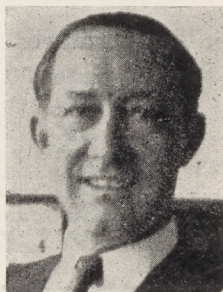
Tunnel Lining Progressing In Monrovia 3 and 4

Installation of the steel cylinder liners in the western section of distribution tunnel, Monrovia No. 4, was started on November 24. These cylinders, which are 10 feet in diameter and 33 feet long, are being laid on the six per cent grade in this section of the tunnel. This is the steepest grade in any tunnel on the aqueduct. Being constructed in a manner similar to the Cajalco Outlet tunnel, the steel liners are backed on the outside with concrete, and are to be lined on the inside with a two-inch coating of gunite. The total length of the steel lined section of the tunnel is 2856 feet. By December 4, a total of 9 sections of steel had been installed, concrete being placed behind each cylinder immediately after it was installed.

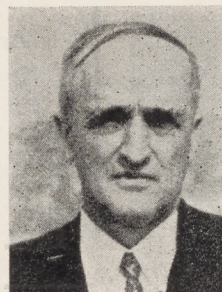
On the other side of Monrovia Canyon, work is still in progress on the concrete lining of Monrovia tunnel No. 3. During the week ending December 4, a total of 475 lineal feet of arch was placed and 155 feet of invert. Thus far 16,921 feet of the arch has been placed and 31,631 feet of invert. The tunnel is 32,095 feet long.

Monrovia No. 4 is being constructed by Dixon, Bent, and Johnson with W. N. Evans as superintendent, and Monrovia No. 3 is being constructed by The West Construction Co. with E. M. Penn as concrete superintendent.

Who's Who On the Aqueduct



V. D. Elliott



H. G. Hawley



Simon Perliter

V. D. ELLIOTT

Engineer, Electrical-Mechanical Division, Metropolitan Water District

A native son, born in Pasadena, California, January 17, 1892 . . . Graduated Bachelor of Science, Electrical Engineering, California Institute of Technology, June, 1915 . . . 1916-1917, draftsman, hydraulic department, Pacific Light and Power Corporation, on design of Big Creek dams, siphons, spillways, and the design of transmission line towers . . . 1917-1918, 2nd Lieutenant, Corps of Engineers, A.E.F., in France with the 6th Engineers . . . Was also with the 3rd and 4th Australian Divisions, and was Gas Officer 92nd Division during Battle of Argonne . . . 1920-1921, Southern California Edison Co., assistant division engineer on power house construction and on San Juan River survey . . . 1922-1926, private practice in Los Angeles, subdivision, street, and utility construction . . . On

Colorado River Aqueduct project since 1929 . . . With L. A. Water Department on designs and estimates and transferred to M. W. D. in 1930 . . . Since then has worked on preliminary designs and estimates of aqueduct pumping and power systems, field location of 230 kv line, and field location of temporary power and telephone lines . . . Field and office engineering in preparation of specifications for 230 kv transmission line . . . Married, and has a son and a daughter.

H. G. HAWLEY

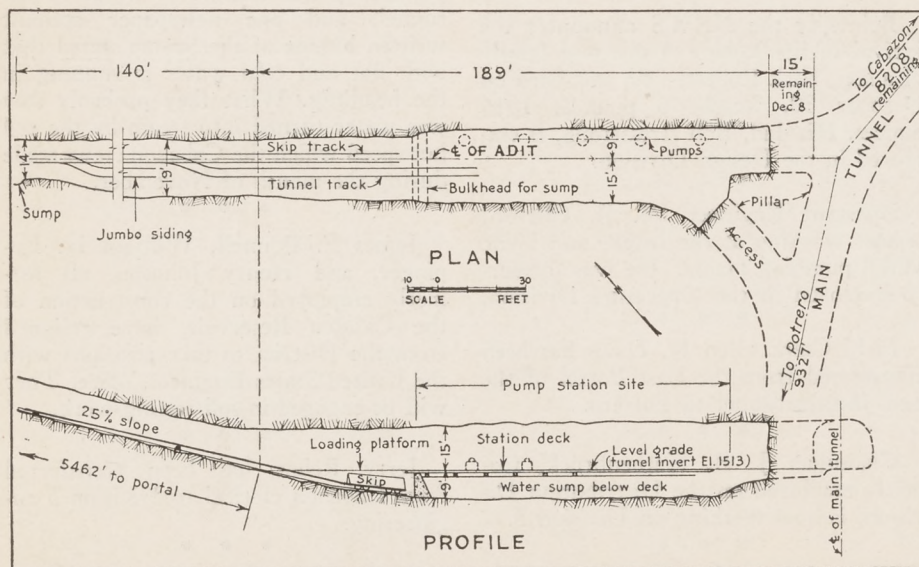
Assistant Engineer, Specifications and Contracts, Metropolitan Water District

Born July 2, 1884, in Hastings, Minnesota . . . Graduated with degree in Civil Engineering from University of Minnesota in 1907 . . . Has had many years of experience in irrigation and railway location and in construction work. . . . 1917-1920 with Pacific Electric Railway on design of special track work, plans, and estimates . . . 1920-1925, assistant cashier, First National Bank, Delano, California . . . Has been on Colorado River Aqueduct project since April, 1926 . . . While with L. A. Water Department worked as estimator and hydraulic designer . . . With M. W. D. since 1930, designs and estimates, and preparation of specifications and contracts . . . Is known as "Harry" . . . Is married and has two children.

SIMON PERLITER

Assistant Engineer, Design Division, Metropolitan Water District

Born in Russia, August 1, 1901 . . . Graduated Bachelor of Science in Civil Engineering, University of California at Berkeley in 1925 . . . 1925-1929, City Engineer's Office, City of Los Angeles, design of sewers and substructures . . . Colorado River Aqueduct project since 1929 with L. A. Water Department and M.W.D. . . . Principal work in connection with hydraulic and structural design . . . Answers to "Si" . . . Is married, and has a daughter.



This plan and profile sketch of the station at the foot of the Lawrence adit was drawn for the NEWS by Charles Fredericks of the Statistical Division of the L. A. Office. All distances shown as remaining to be driven are as of December 8, 1937.